

**STRATEGIES FOR IMPROVING THE POVERTY REDUCTION
POTENTIAL OF FARMING FOR SMALL-HOLDER WOMEN FARMERS
IN NIGERIA.**

A Project Paper

Presented to the Faculty of the Graduate School

of Cornell University

in Partial Fulfillment of the Requirements for the Degree of
Master of Professional Studies in Agriculture and Life Sciences
Field of International Development.

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August 2018

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ABSTRACT

Nigeria's struggle with persistent poverty is well-documented. Seventy percent of Nigeria's 182 million citizens live below the poverty line (World Bank 2016). Macroeconomic policies and the tough business environment have further highlighted the difficult poverty situation in the country. Nigeria's reliance on oil and other petroleum-derived global commodities prone to volatile market prices causes much economic instability. For instance, during the oil prices crash of 2016 had a serious impact on the economy. As reported in the Financial Times, "the fall of the oil prices hit Nigerian economy hard ...the economy contracted by ...2.06 percent in the second quarter ...additionally, inflation hit 17.1 percent in June of the year, the highest rate in more than a decade" (Chalie Mitchel: FT September 26, 2016). Also, the massive importation of foreign goods also creates capital flight and the consequent destruction of local productive capacities, thus living a huge deficit in the comparative advantage potentials of Nigeria (Bosede Y. 2010). The balance of trade between Nigeria and her neighbors is hugely tilted against Nigeria. One area, however, where Nigeria could maintain leadership within the region if properly articulated and pursued is in agriculture. This is so because not only does Nigeria need enormous food to maintain her rapidly growing population, it needs the jobs that agriculture can provide to lift her poverty challenged populations out of poverty. There is, therefore, a gender-sensitive nature of the poverty in the country (J. C. Anyanwu 2010). Importantly, women represent a significant part of the teeming Nigerian population – 52 percent. This translates to more than 90 million people. In this population of women, more than 62 percent of them are between the ages of 15 – 60 years (World Bank: 2018). This means that this population of women present a great potential for positive contribution to the agro-economic development in Nigeria is they can be given incentivized to embrace agriculture more. It is also clear that employing these women more strategically in agriculture can

be a major way of reducing poverty in the country. This work seeks to explore some strategies through which women engagement in agriculture can be pursued as a means of reducing poverty. Some strategic proposals laid out later in this paper reflect actions designed to reduce poverty through more effective women's engagement in the agricultural economy. The project paper is divided into five chapters. The introductory chapter sets out the purpose of the study and explains the concepts and methods used. The following chapters to examine strategies for exploiting into the potential poverty reduction capability of interventions that focus on small-holder women farmers in Nigeria. Also, an attempt will be made to examine some of the challenges which might impede these strategies and how they might be removed. Finally, the paper concludes with recommendations both for policies and future research in the field. It is hoped that the effort made in this work will contribute to the ongoing search for sustainable solutions to the poverty problem in Nigeria

BIOGRAPHICAL SKETCH

Amarachi Emeziem was born and raised in South-Eastern Nigeria. This gave her the experience and motivation to take an early interest in socioeconomic issues like poverty eradication, education agriculture, and rural development. She is a Candidate for the Master of Professional Studies (MPS) in International Development. Her focus and specialization are in International Policy and Rural Development. She received her Bachelor of Science (B.Sc.) in Computer Science with honors from Anambra State University Nigeria. During her National Youth Service Year in Nigeria, she was assigned to teach in high schools and through that experience, she quickly realized what tremendous contributions she can make to community development through STEM education and rural development initiatives. Therefore, during that one year, she taught Computer Science and general computer appreciation to High School students in the Niger Delta area – Bayelsa State, Nigeria.

Subsequently, Amarachi joined public service as a High School Science teacher, under the Imo State Ministry of Education, Nigeria from 2012 - 2017. Through this, she has been mentoring youngsters – especially girl students – as to the need to embrace self-development through education, skills acquisition, smallholder agro-engagement and rural community development. Due to her optimum interest in education agriculture and community development, she enrolled in the Master of Professional Studies (MPS) – International Development – at Cornell University. This experience has been so rewarding as she has been exposed to a wide range of courses – concentrating mostly on agriculture, gender issues, and policymaking. She is grateful for her graduate study experience at Cornell University and hopes to use all that she has learned in service of God and humanity through policymaking, mentoring, community development, advocacy, and volunteering.

To my Parents:

Damian Madu Emeziem-Ukwu (*late*)

Petrollina Nkechinyere Emeziem (*Nee Anyanwu*).

ACKNOWLEDGMENTS

In life, gratitude is the finest gift we can give. Sometimes, however, there are special cases when you wonder whether a word of thanks is enough. In other words, whatever I say here is merely a small token of gratitude to all who have contributed to making this graduate study journey a success. I thank most exceedingly my mentor and academic advisor Professor Terry Tucker. All through the time he patiently and painstakingly – like a father figure – guided me through my work and project. His inspirational supervision of the study visit with my cohort to India will always be remembered. Truly, I cannot thank him enough for his contributions to the successful experience I have had at Cornell University.

Also, many thanks to Prof. Jim Lassoie, the head of the Department of Global Development whose candor and kindly disposition kept me and all my cohort going even in many challenging times. Even when he was a bit indisposed in health, he did not relent in being available and supportive to all of us. More so, I would like to thank in a special way Denice Percy for her tireless commitment to the wellbeing and success. Always wearing a smile, and ready to help even when it is ordinarily inconvenient for her. Her commitment, dedication, sincerity, and fairness to all are exemplary.

I will not fail to mention the Fellowship and general academic support which I received from the Institute for African Development. I, therefore, thank Professor Muna Ndulo, (the Director of the Institute for African Development). I also thank Jackie Sayegh, Nomfundo Makhuboh and Nina Chaopracha who gave me uncommon friendship and a sense of belonging.

Above all my profound gratitude goes to Almighty God for his goodness and mercy. Cornell has been for me a dream come true and I hope to be a worthy ambassador of this great center of learning.

TABLE OF CONTENTS

Biographical sketch	iv
Dedication	v
Acknowledgments	vi
Table of Contents	viii
List of Abbreviations	ix
Chapter 1	1
Chapter 2	12
Chapter 3	27
Chapter 4	42
Chapter 5	49
Bibliography	52
References	57

LIST OF ABBREVIATIONS

ACGS	Agricultural Credit Guarantee Scheme
ACSS	Agricultural Credit Support Scheme
AIDS	Acquired Immune Deficiency Syndrome
BOA	Bank of Agriculture
CBN	Central Bank of Nigeria
DFID	Department for International Development
EFInA	Enhancing Financial Innovation and Access
FADAMA	Hausa word which means Flood Plain or Valley-bottom
FAO	Food and Agriculture Organization
FCT	Federal Capital Territory
GDP	Gross Domestic Product
HIV	Human Immune Virus
ICT	Information Communication Technology
MFB	Micro Finance Bank
MMS	Multimedia Messaging Services
MTT	Modern Monetary Theory
NACRDB	Nigerian Agricultural and Cooperative Rural Development Bank
NBS	National Bureau of Statistics
NCC	Nigerian Communication Commission
NGO	Non- Governmental organization
NIRSAL	Nigeria Incentive-Based Risk Sharing System for Agricultural Lending.

SMS	Short Message Services
UK	United Kingdom
UN	United Nation
UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organization

CHAPTER 1

INTRODUCTION

The Poverty Reduction Potential of Agriculture – An Overview

Agriculture is one of the oldest occupations of humanity. Even before the development of a systematic study of its nature and processes, humans began to produce food as an alternative to the hunting and gathering that had previously been the basis of human living and survival. Over time, farming has evolved and become not only a major industry but the foundation of an individual revolution in many places around the world. It continues to provide the basic raw material and commodities required for the manufacturing of both primary and secondary goods (Boehlje M. et al 2011). With reference to Nigeria, her rich and expensive arable lands provided the primary incentive for the development of rich commodity markets in many parts of the West African region. During the colonial period- whether in Kano, Lagos, Port Harcourt or Aba – commodities like cocoa, groundnut, palm oil, and cotton formed the basis of the major economic activities of the people (R Olufemi. E 1960).

Thus, at independence and within the early years of the post-colonial State, agriculture remained the backbone of the economy. The export capacity of the country was measurable and largely dependent on such agricultural products as cocoa, palm oil, cotton, and groundnuts. This provided the resources with which the Federal and regional governments financed their development plans within those early years (Olufemi R, 1960).

However, the discovery and exploitation of oil in commercial quantities would ultimately change the economic outlook of Nigeria. Great dependence on crude oil export would ultimately serve as a disincentive for agriculture, reduce public investments in agricultural research, and

negatively impact its poverty reduction potential. However, there is increasingly a realization that this line of dependence on a single commodity, to the detriment of agriculture is a wrong policy approach. Thus, in a recent study, the World Bank has highlighted the overall potential of agriculture to reduce poverty in Africa. This study, though focused on other parts of Africa outside Nigeria, has relevance to the existing situation in Nigeria.

Hence, it was noted that at the beginning of the 1980's, both Asia and Sub-Saharan Africa suffered from mass poverty. In 1981, it was estimated that 58%, 52%, 42% of the populations of East, Asia, South Asia, and Sub-Saharan Africa, respectively lived on \$1 (US) per day or less (Chen, S. et al 2004). By the turn of the 21st century, consumption poverty had fallen in East Asia to 3.6 percent and to 15 percent in South Asia while poverty in Sub-Sharan Africa increased slightly to about 42 percent (World Bank: Poverty and Equity Data Portal).

It has been argued that “the persistent poverty and weak agricultural performance in Africa on the one hand and the sharp decline in poverty and strong agricultural performance in Asia, on the other hand, do not necessarily reflect a causal link. They do suggest the need for policymakers to reconsider the contribution that agriculture might make to the overall economic development and poverty reduction” (Luc Christiaensen et al 2006). Often, there is a tendency to downplay the overall potential of agriculture to reduce poverty because its impact is often more appreciated by its interaction with other economic indicators like investment in infrastructure and industrialization. Therefore, its direct impact on poverty may look weaker than it appears when examined together with other factors like investments in agricultural credit or infrastructure. Agriculture holds a lot of advantages in terms of poverty reduction. This is particularly so for the lower income earners like women whose subsistence in most rural areas in Nigeria is greatly dependent on agricultural activities.

It is therefore highly important to note that for developing economies like Nigeria, agricultural property combined with other economic activities holds a great potential to radically empower communities and change their overall economic fortune. This overall potential of agriculture was articulated by Theodore W, Schultz in his Nobel Lecture of December 1979 when he stated thus:

“most people in the World are poor, so if we know the economics of being poor, we would know much of the economics that really matters. Most of the World’s poor earn their living from agriculture, so if we know the economics of agriculture, we would know much of the economics of being poor. People who are rich find it hard to understand the behavior of poor people. Economists are no exception, for they too find it difficult to comprehend the preferences and scarcity constraints that determine the choices that poor people make. We all know that most of the world’s people are poor, that may earn a pittance for their labor, that half and more of their meager income is spent on food, that they reside predominantly in low-income countries and that most of them are earning their livelihood in agriculture. What many economists fail to understand is that poor people are no less concerned about improving their lot and that of their children than rich people are”.

This is quite significant and is borne out of the experience of Mr. Schultz. It emphasizes the less appreciated potential of agriculture as a tool of poverty eradication/ reduction for low-income earners. This is more so with women who dwell in rural areas and who often bear the biggest burden of poverty in most of these societies. The author did not miss words in any way in exposing this potential. In further explaining the complex connection and capacity of agriculture, it was noted that “agriculture in many low-income countries has the potential economic capacity to produce enough food for the still growing population and in so doing can improve significantly, the income and welfare of poor people.

The decisive factors of production in improving the welfare of poor people are not space, energy, and cropland; the decisive factor is the improvement in population quality” (Schultz 1979). One other important contribution to the understanding of poverty reduction strategies as it relates to agriculture is that there is an improper emphasis on land while forgetting the humans who are

involved in the agricultural process. He emphasizes the economics of human capital regarding productivity in agriculture and how this reduces the incidence of poverty. Clearly, there is a well-documented view that agriculture has a great potential in the reduction of poverty in many developing economies. Developing countries are in dire need of this. It affects the balance of trade and employment. It is enhancing the income capacity and nutrition possibilities of low-income households in these developing economies. Its utility for poverty eradication/reduction can therefore not be over-emphasized.

Concept and Terminologies Examined

Poverty is a concept of immense debate. This is not surprising because it has complex aspects and varies from one place to another. Its nature and dimensions are also a matter of the interaction of different economic factors within a given society. It is often considered as a state of being poor. According to the United Nations, poverty has become an international concern yet there is no international consensus or guidelines on measuring poverty. What can be seen is that many definitions of poverty concentrate on the economic side of things. Some definitions indeed make the economic side seem like the only side of the poverty definition.

A careful observation of the economic environment in Nigeria reveals that poverty has many aspects beyond the economic aspect. It involves social, cultural, and economic and psychological dimensions (Chimobi U, 2010). This no doubt is the reason why the World Bank and other institutions of global governance have tried to provide basic indicators for ascertaining and measuring the incident of poverty reduction in different communities around the world. Though, this is not a one size fits all as it is often analyzed, it serves as a reasonable benchmark for thinking through the incident of poverty and seeking a way to reduce its effect on the lives of different communities.

Amartya Sen (2004) defines poverty as “the worst form of human deprivation. It cannot only be the lack of necessities of material well-being but the denial of opportunities for living a tolerable life”. From Sen’s definition of poverty, one can see two angles to the problem of poverty – human deprivation in terms of necessities of material well-being and opportunities of living a tolerable life. What this means is that poverty has the larger impact of denying individuals and communities the opportunities which they could have taken advantage of to live a more meaningful life. This is more so because poverty aggravates such other problems as poor nutrition, access to water and sanitation, the spread of diseases and inter-generational cyclic of poverty (Olowa O, 2012).

Other social scientists have also recognized the need to expand the definition of poverty. To this end, Barnes (2010), Kankwenda (2003) defines poverty as “a multidimensional phenomenon influenced by a wide range of factors, these include poor people’s lack of access to income earning and productive activities and to essential social services”. What this reveal is that poverty has several indicators which include lack of a meaningful income stream and productive resources enough to ensure a sustainable livelihood. The incidence of hunger and malnutrition, famine, poor food distribution, strong illness and high incidence of mortality are all related to poverty. It also covers questions of lack of access to housing, social discrimination, and exclusion. Also, poverty is increasingly being characterized by lack of participation in decision making in civil, social and cultural life (Edon, 2003). This is very important as it is a highly contributing factor to poverty rate among women. It is often easy to have a policy meeting on an issue that affects women without having any woman on the panel. The aspects of agriculture which culturally places men as heads of families for the purposes of land allocation is one that can greatly affect the poverty problem amongst women (Adamu et al 2014).

One generally accepted standard of the definition of poverty is that of living on less than two dollars per day. Further to this, in a World Bank report on poverty (2005), A Kenyan man (1997) was said to have stated this when he was asked to define poverty: “Don’t ask me what poverty is because you have met it outside my house. Look at the house and count the number of holes. Look at my utensils and the cloth that I am wearing. Look at everything and write what you see. What you see is poverty”.

What this means is that what amounts to poverty can be contextual. To understand it, one must, therefore, situate it. It may be about several issues or a combination of others. Thus, the multi-dimensional nature of issues of poverty and the indicators have been captured variously by Sen (1997); Foster and Sen (1997); Lipton and Ravallion (1995); Chambers (1994) and Salmen (1987). From these scholars, what can be seen is that there are five major structures of poverty which help us understand the concept.

Firstly, poverty is a convergence of multiple issues within any given society. Gender, age, culture, religion, and education affect poverty and its definition. Secondly, poverty is commonly defined as the lack of material well-being including but not limited to food, shelter, and clothing. Land and other material possessions are also significant indicators of poverty. Equally, an examination of how poor people see and think about poverty shows an important psychological aspect of poverty.

According to the World Bank report, “Poor people are acutely aware of their lack of voice, power, and independence, which subject them to exploitation. Their poverty also leaves them vulnerable to rudeness, humiliation and inhumane treatment by both the private and the public agents of the state from whom they seek help. Poor people also speak about the pain brought by their unavoidable violation of social norms and their inability to maintain cultural identity through

participation in traditions, festivals, and rituals. This inability to fully participate in community life leads to a breakdown of social relations.” Another accepted indicator of poverty is the lack of basic amenities. This includes road transportation, water, and health facilities. It is also known that poor people concentrate on their lack of assets since this makes them vulnerable and critically reduces their ability to participate in the life of their community.

According to Cambridge Dictionary: 2017, potential as is used in this work means “having or showing the capacity to become or develop into something in the future.” It is about something that is possible but not yet achieved. As regards this project, and the poverty reduction potential of agriculture among smallholder women farmers, the potential could be interpreted to mean the possibilities which agriculture brings to the efforts at reducing the incidence of poverty among women farmers in Nigeria. The strategies for doing this will include those ways or combination of ways and policies by which the goal of poverty reduction can be achieved through the broad instrument of agriculture. What this work intends to do is, therefore, to give and analyze several processes that could help society to achieve this all-important goal.

Research Problems and Questions

There is an unacceptably high incidence of poverty in Nigeria. The unacceptable nature of it is further highlighted by the great potential of the country which remains grossly unexplored or used for the benefit of the populace. There is also another troubling aspect of the problem of poverty. Almost 50% of the female population in Nigeria live below the World Bank benchmark of \$2 (two dollars) per day. This troubling aspect is more dangerously seen in the women who dwell in the rural areas. Interestingly, most of these women are below the age of 40 years. This means that they are vibrant and could become an engine of massive poverty reduction if only their potential was harnessed through agriculture which they are already conversant with.

Hence the research questions:

1. What are the possible strategies for harnessing the poverty reduction potential of agriculture amongst smallholder women farmers in Nigeria?
2. How may these strategies be turned into small and targeted policies?
3. How may these programs, resources, and incentives derived from these policies be made accessible to these smallholder women farmers?

It is the argument of this project that a sustainable answer to these questions, would help towards finding a lasting solution to the problem of chronic poverty in Nigeria.

Literature Review

In the field of development studies which connects with such subfields as economics, agriculture, sociology and political economy, there is a rich literature regarding what potential contributions agriculture has in economic development and poverty reduction. Many scholars have therefore attempted to explain the issues in the debate in many ways. Some of the arguments provided do not necessarily sound categorical in conclusion because factors of economic consideration are often subjected to an interaction of factors. Again, there is also a tendency among the scholars to place reliance on data. While this is extremely important, it makes it difficult to study communities and situations where the availability of data is problematic or where there is limited know-how about the collation and analysis of data.

Kirkpatrick et al (2004) seem to be of the view that development and consequently reduction in poverty is driven by industrialization. Hence, as societies develop and advance their quality of living conditions, they tend to move away from agriculture and rely on industrialization as the basis of its continued advancement. This disposition which is also expressed by Lewis (1955) seems to be unlikely. It does not respond to the value placed by many rural communities and the

world. More so, in a globalized world economy and more particularly since the 1990's, trade in agricultural products across borders has become a major source of income for most communities around the World who engage in agriculture. I shall come back to this, but it seems that this view no longer enjoys much respect in the field.

Hence, Anderson et al (2008) have attempted a broad study of the many incentives or disincentive to agriculture is a potential tool for poverty reduction. The vast data which covered 75 countries and covering the period 1955 to 2007 seems to reject the prior opinion that agriculture has limited capacity to reduce poverty particularly amongst low-income communities around the World. The research while contradicting the pessimistic view expressed earlier by some scholars noted that “the vast majority of the world's poorest households depend on farming for their livelihood. In the past, their earnings were often depressed by their own country's policies which had pro-urban and anti-agricultural and anti-trade biases”.

It highlighted the potential distortions caused to agriculture by government policy environments which in turn reduce or at least eclipse the potential contribution of agriculture to the overall effort at reducing poverty. One other takeaway from this is that the political economy of any of the given country like Nigeria as in our present case has a lot of capacity in determining the realization or otherwise of the huge poverty reduction potential of agriculture. Perhaps one other lesson we can draw from this existing literature and study is the need for the right question regarding the policy environment. This connects to the broad question which this work is asking – How may we tap into the poverty eradication potential of agriculture as a way of lifting women out of poverty. Because of the perceived interlinks between agriculture and poverty reduction, the UK Department for International Development has also made a critical study of the area through its expert team on agriculture and natural resources.

The team which collaborated with Anne Thomson of Oxford University Policy Management observed the critical linkage and the overall connection between the increase in agricultural productivity and reduction in poverty. Drawing from data and examples around the world particularly in Asia, the paper was able to show the linkage between successful agriculture and reduction of poverty. It noted what it referred to as four “transitions” through which the links between agriculture and reduction of poverty maybe forged”. These were identified as:

- a. direct and relatively immediate impact of improved agricultural performance on rural incomes;
- b. Impact of cheaper food for both urban and rural poor;
- c. Agriculture’s to contribution growth and the generation of economic opportunity in the non-farm sector; and
- d. Agriculture’s fundamental role in stimulating and sustaining economic transition, as countries (and poor people’s livelihoods) shift away from being primarily agricultural towards a broader base of manufacturing and services” (DFID: 2004).

More so, Satis Devkota and Mukti P. Upadhyay (2013) have carefully studied empirically the impact of agricultural productivity and poverty reduction in Nepal. In this research, the authors argued that there is clearly a quantitative link between agricultural productivity and reduction or otherwise of rural household poverty in Nepal. Its findings were based on a careful analysis of data from a nationwide Nepal living standard survey carried out in (2004). Though Nepal is a country outside Africa, its developing status has many parallels to the position of Nigeria. It has a large rural population that is still largely dependent on subsistence agriculture for survival. The work revealed one other consequence of the trap of rural poverty which agriculture can also reduce –

incessant migration and the emptying of the rural communities of enabling human capacity for development and growth.

A critical addition to the literature in the field is also the work done by Luc Christiaensen et al 2006 (World Bank Policy Research Working Paper). This was also an empirically-based research work which sought to use several case studies to examine the relative contribution of agriculture to poverty reduction. In all these, there is a limited scholarly study of the Nigerian situation. Part of the problem is the limited availability of data regarding the policy disposition of Nigeria and agricultural activities. A major determinant factor to this is the informal nature of most of the rural agricultural activities. Also, the literature regarding how the potentials of agriculture could be tapped to reduce poverty among women is nearly nonexistent. What is seen in the literature is a general poverty eradication proposal that does not focus on women particularly.

This is a gap which this work intends to start filling by looking at specific strategies through which the poverty reduction potential of agriculture could be harnessed to help the women segment of the population. It is hoped that several strategies which shall be highlighted here will focus attention on the possibilities. Again, it is believed that this will draw the attention of policymakers to this opportunity and the best that can be achieved through it.

Undoubtedly, the limits of this work will not make for the complete filling of the noted gap in the literature. It will, however, commence the process of finding sustainable strategies for the articulation of poverty reduction potential of agriculture amongst smallholder women farmers in Nigeria.

CHAPTER 2

NATURE, DETERMINANTS, INDICATORS AND GENDER DIMENSION OF POVERTY IN NIGERIA

Poverty in Nigeria is marked by many indicators and determinants like in many other places in the world. These determinates and indicators have their uniqueness sometime within the Nigerian society due to a number of cultural and social issues that mix up with them. Equally, there are gender dimensions to the problem which is not often open to ordinary investigation. Where they are highlighted, they seem often to disappear within the larger collection of data, thereby making them seemingly hidden.

It is therefore important to bring out this aspect of the issue of poverty in Nigeria. The idea is to give a voice to the peculiar problems that worsen female poverty in Nigeria. In so doing, attention is focused on them and policies can then be guided to reduce the problems. Therefore, this segment of the work will dive into the nature, determinants, indicators and gender dimensions of poverty in Nigeria with a view to achieving these stated goals.

Overview of Poverty in Nigeria

The Poverty Index of Nigeria is very high (World Bank: 2018). It used to be the second only to that of India, but the recent report of the World Bank cited above has changed that negatively. Today, Nigeria is home to the highest number of chronically poor people in the world. This is in spite of the fact that the population of India far outstrips that of Nigeria. The tragedy is, therefore, a matter of much concern to well-meaning Nigerians. Many development experts are therefore rightly worried about the scope and continued expansion of this problem.

As a key player in the West African region – having 47 percent of the total population of the region – Nigeria is economically strategic. Hence, the overall poverty index of the country has

broad implications for the region. Yet the life expectancy in Nigeria is at the low level of 53 years. This is actually one of the lowest in the world and is equivalent to some of the countries in a war situation. For instance, the life expectancy in Afghanistan is 60 (World; Bank 2016) years despite the wars and socio-political crises it has had in recent times. This is also despite the fact that Afghanistan is not an oil producing country. This is, therefore, a sad indication of the cost of poverty in the country.

It is important to note that even though the incidence of poverty in Nigeria is great, it is connected to the overall poverty rate in sub-Saharan Africa. That is to say, that the geography of poverty as it is known today, locates the center of poverty within the region. When that center is further mapped, it finds that the number of households in Nigeria living below 2(two) dollars per day to be the highest in the region. It would also be remiss not to point out that the overall population supremacy of Nigeria in the region may have placed Nigeria in a position where it will almost always have high poverty ratio within the region. A look at the population of the neighboring countries in the West African Region readily reveals the population disparity between Nigeria and her neighbors. However, the point being made is that when one examines the huge resources available to Nigeria vis-à-vis her neighbors, Nigeria ought not to be a poverty challenged country rather an oasis of hope even for her less endowed neighbors.

Specifically, the Nigerian poverty situation is traceable to a number of determinants and indicators which have now drawn global attention. First of all, Nigeria's overall economy is dependent on mining activities as the mainstay of its economic growth and development programs. Crude oil has accounted for about 80 percent of the income of the country from the mining sector. The different sectoral distributions and their contribution to the Gross National Product (GDP) as put together by the Nigerian National Bureau of Statistics is as follows: manufacturing 24.10%,

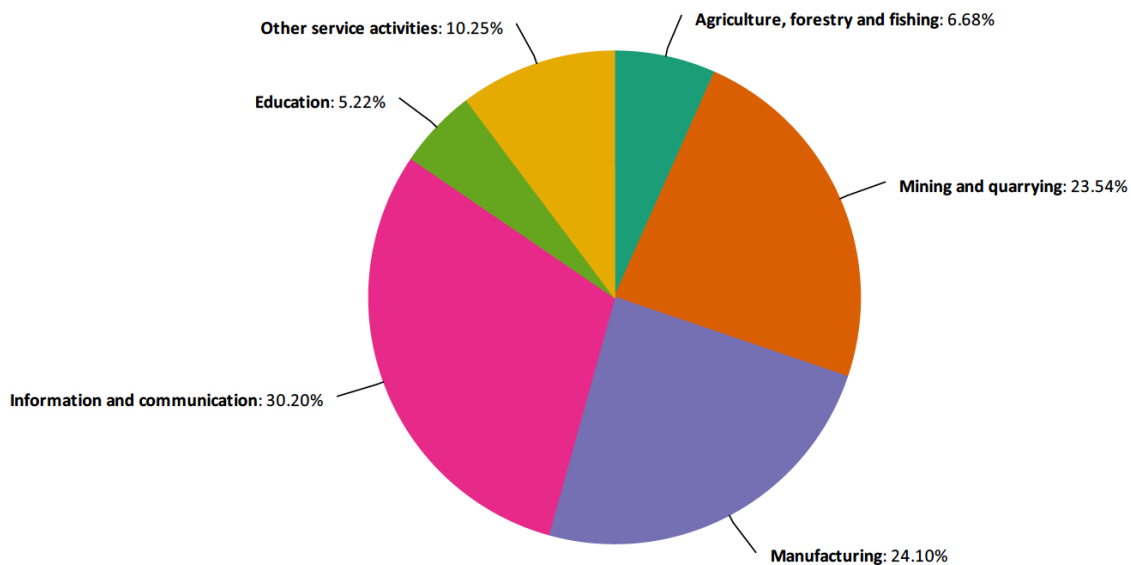
mining and quarrying 23.54%; agriculture, forestry and fishing 6.68%; education 5.22%; other services 10.25%, information and communication 30.20% which amount a total of 99.99%.

The significance of this is that despite the land, water resources and human capital available to Nigeria, agriculture still contributes less than 10 percent of the gross domestic product. One can say from this that the agricultural potential of Nigeria is underutilized while the other sectors like mining and manufacturing which have their major base in petroleum and petroleum-related industries dominate the economy.

There is, therefore, an over-dependence, on a single commodity for Nigeria's economic well-being. This is a great source of fluctuation and volatility in the country. Changes in the international commodity market affect the income of the country and thus a shrinking of its pool of resources for strategic investments in agriculture, education, social amenities and other areas that could help reduce the incidence of poverty. This led, to the general recession in the economy and general problems of the balance of trade in 2016 when the global price of oil collapsed due to a glut in the international market.

An illustration of the contribution of the different sectors of the economy to the GDP of the country as published by the Nigerian National Bureau of Statistics is as follows:

Contribution to GDP



Source: National Bureau of Statistics Nigeria.

This is revealing and leaves the economy weak in many respects. The outcome of this is that there is so much unproductivity in the economy when the figures are compared with the overall population of the country. It has also kept poverty rates on the increase. What is evident from research findings, therefore, is that the poverty ratio is above 50(fifty) percent. Besides this, undue dependence on commodities like oil and gas resources as the mainstay of the economy, the issue of insecurity in some parts of the country in recent times has also aggravated the problem of poverty.

Thus, with the emergence of Boko Haram in the northeastern part of the country in 2009 as a major global terror organization, many rural and farming communities in the region have been displaced. This internal displacement has many identifiable difficulties for the local economy which is largely agriculturally-based. It is also clear that women and children are more

disproportionately affected by the crises as their subsistence dependence on agriculture and local trading in agricultural production has been disrupted. This has destroyed the economy of that region and put further strain on the diminishing resource of the country. What has happened therefore is that a huge amount of state resources is put into security and emergency relief efforts for victims of Boko Haram insurgency and internally displaced persons in general. The insecurity factor is, therefore, a major driver of the high poverty rate in that part of the country.

The table below shows the poverty structure of the country.

POVERTY	Rate (Number of Poor)	Period
National Poverty Line	46.0% (71.0 million)	2009
International Poverty Line 133.5 in Local Currency Unit or US\$1.90 (2011 PPP) per day per capita	53.5% (82.6 million)	2009
Lower Middle Income Class (IC) Poverty Line 224.9 in Local Currency Unit or US\$3.20 (2011 PPP) per day per capita	77.6% (119.8 million)	2009
Upper Middle Income Class (IC) Poverty Line 386.5 in Local Currency Unit or US\$5.50 (2011 PPP) per day per capita	92.1% (142.2 million)	2009

Source: World Bank: Nigeria Country Poverty Survey, October 2017.

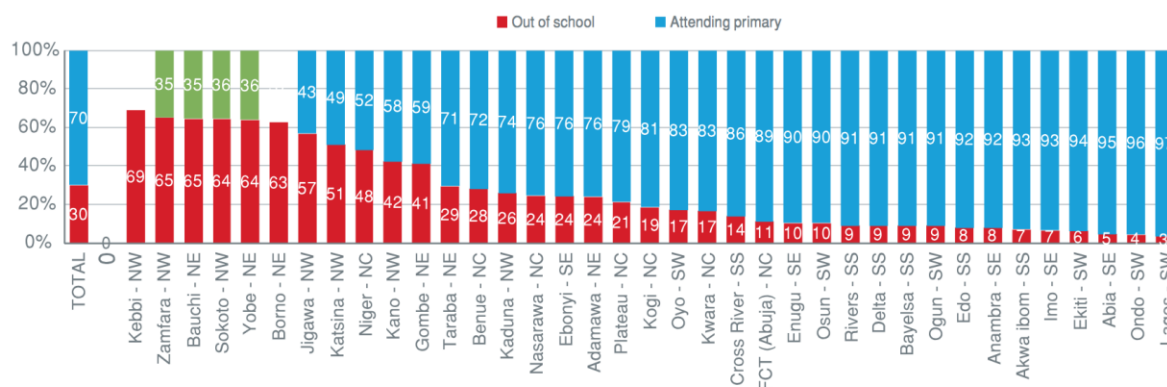
Another significant determinant of the nature of poverty in Nigeria is the high incident of educational deficiency in many rural communities in the country. This is quite high in the rural communities that live in the riverine states like Akwa Ibom, Bayelsa, Cross Rivers, and Rivers. This trend is also seen in the northern parts of the country, like Bornu, Adamawa, Taraba, Zamfara and Kano and Sokoto where enrolment in schools is limited. According to UNICEF, about 10 million Nigerian children of school enrollment age are out of school. What can, therefore, be observed is that many of the citizens who are young adults and teenagers are getting into early marriage and this not only exposes them to the problem of maternal mortality, it robs young people of the capacity needed to be better-contributing members of society. A highlight of this problem of out of school children which is even higher in the case of girl children is seen in a 2015 work by UNICEF Nigeria in collaboration with the Nigerian National Bureau of Statistics. This showed

not only the incidence of out of school children but their distribution around the different regions of the country.

Children from the three southern geopolitical zones are twice as likely to attend primary school than children from the North-East and North-

West zones. In some States – Bauchi, Borno, Kebbi, Sokoto, Yobe and Zamfara – nearly two children in every three are out of school.

Distribution of primary school children (age 6-11) according to school attendance by States (MICS 2011)



Source: UNICEF Nigeria Fact Sheets Education 2015.

The more troubling aspect of the high incidence of out of school children is the fact that it creates an army of the easily manipulated crowd and a huge incidence of illiteracy. More so, it compromises the capacity of this young but insufficiently educated population from being able to apply modern approaches to farming and food processing. In the end, low agricultural productivity affects the household's income and limits the chances of reduction in poverty. In a way, the incidence of early marriage has also been implicated in high fertility rate in the childbearing age bracket of the population. Sixty (60) percent of the population is estimated to be below the age of 40 years. What this has done is keep the population growing at a high rate while the productive capacity of the economy grows marginally or at times shrinks as we saw in 2016 when the economy went into recession. These factors combine at different levels and connections within the economy to create problems which increase the poverty rates. It also increases dependency and high rates of maternal mortality.

Due to this high rate of poverty in the country, subsistence agriculture remains the source of daily survival for many in the country. This is more so among the citizens that dwell in the rural areas or countryside in general. In the riverine areas, fishing and fish farming is still a major income earner for the rural communities and women are often involved in the entire processes. In all this subsistence farming, women are in the forefront. They are the ones who engage in small-holder gardening to produce the needed variety of vegetables for the nourishment of both their families and provision of basic income. They are the ones who go to the ‘waterside’ as it is often called to buy fish in the early hours of the morning from overnight fishermen so as to resell at a reasonably higher price.

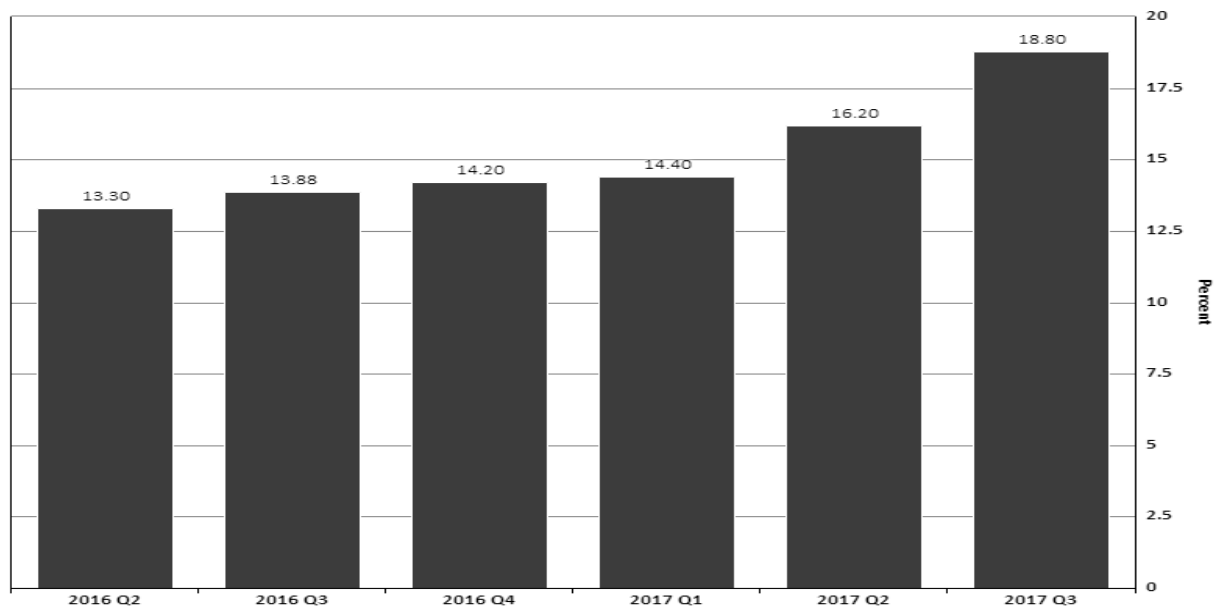
What is clear from this is that their dedication, hard work, and entrepreneurship is very visible. However, their access to farm inputs, best practices, agricultural credits and other incentives for agricultural activities is highly limited and hence, they do not get the best possible productivity. It is my thesis that this huge population of women engaged in subsistence agriculture represents a huge potential for economic growth and poverty reduction if only they can be properly harnessed through well-targeted agricultural policies.

Nigeria has also a high unemployment rate despite the huge agricultural potential and the young population. This is more so among rural dwellers who are mostly farmers. The graph below from the National Bureau of Statistics shows this and how it has continued to grow. It is, therefore, a well-known fact that the high index of unemployment negatively affects the economic potential of the country and also increases poverty.

Apparently, the neglect of agriculture in the days of the military seems to have made the sustainable agricultural production foundations disappear. It is, therefore, a question of seeking to resuscitate the agricultural base of the country in order to open up better opportunities for

development and poverty reduction amongst her populace. This idea of giving agriculture its deserved place seems to have received some support during the last administration. However, that seems to be lack of continuity in pursuing that program as shaped by the last administration. It is my view that this still does not reduce the importance of a revival of agriculture. All that is needed is a leader with the proper vision and commitment towards agriculture.

Labor Markets, Unemployment Rate, Percent

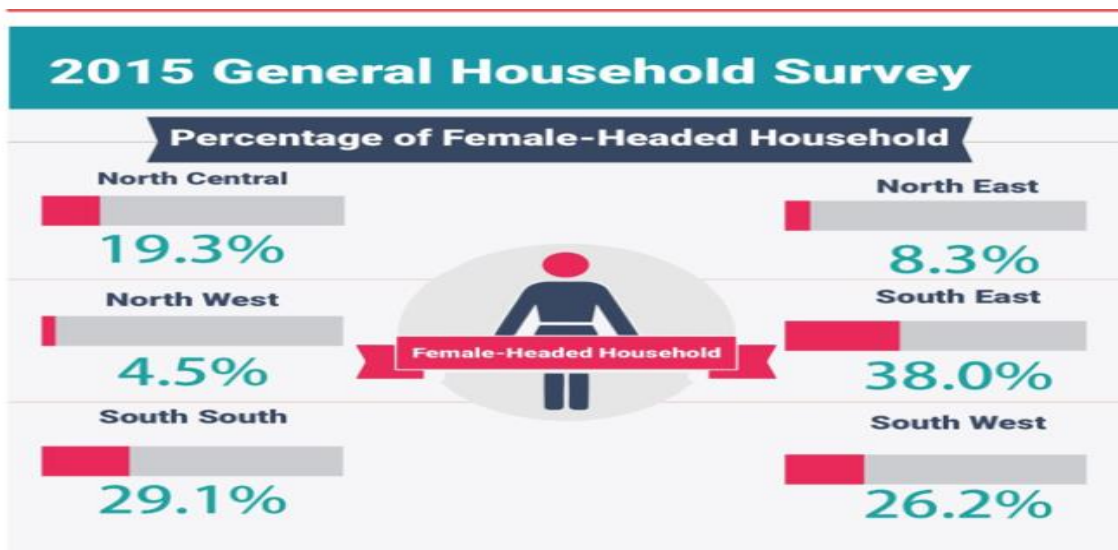


Source: National Bureau of Statistics Abuja;

There are a number of other determinants of the nature of poverty in Nigeria, particularly among the female folk which I shall touch on as this work progresses. It is enough, however, to note that the high incidents of poverty in Nigeria has largely persisted because not much attention has been paid to the agricultural productive capacity of half of Nigeria's population – women. Perhaps, if this potential is used very well, Nigeria might be on her way towards shifting the negative needle of poverty to a positive outcome. Until this is done, what is clear is that the huge human resource capacity which the population of small-holder women farmers brings to the Nigerian economy will be underused and that is to the detriment of the country.

Women and the Demographics of Poverty in Nigeria

The demography of Nigeria shows that women represent a significant percentage of the population and its economic potential. The population of women has been put at 49% of the entire population. Yet they are disproportionately underrepresented in the economic indicators of the community. Despite the high unequal access, women are increasingly bearing the burden of being the heads of households despite the cultural perceptions which often suggests otherwise. In a recent household survey carried out in Nigeria by a group of development organizations in collaboration with the National Bureau of Statistics, this was revealed clearly. The argument one is making, therefore, is that if women are assuming more responsibilities, there should also be an improvement in their access to opportunities which will help them meet those responsibilities. Ordinarily, this should not be a difficult point to make but the incidents of patriarchy and other forms of social exclusion make it impossible to take the argument for granted.



Source: NBS: 2015.

A number of indicators will further explain the limited position of the female population in the economic dynamics of the country. In 2017, the National Bureau of Statistics had gone further to publish a statistical report of women and men in the different segments of the economy

and how they are impacted by policies and development programs. The report, while general in nature, draws attention to issues that affect the economic and earning capacities of women. These include healthcare, education, gender-based violence, inequality and armed conflict. The population growth rate is put at 3.2 percent, while the sex ratio is put at 102 (one hundred and two) men per 100 (one hundred) women.

In 2016, life expectancy for the female population was put at 51 and the percentage of women living with HIV/AIDS was as high as 53 percent. Sixty-seven (67) percent of the women with HIV/AIDS had access to anti-retroviral drugs. The literacy rate among young women 15 – 24 in 2017 was put at 70.9 percent (NBS:2017). This might seem high, but the missing percentile represents about five million young women who cannot read a sentence. The multiple effects of this illiteracy rate on the lives of the particular women and their capacity to contribute to the wellbeing of their community should be a matter of concern to everyone. The enrolment rates of girls and young women in education remained at 48.6 percent. According to FAO (2010), women's share of the economically active population of the country is about 37% while the population share, in general, is a little less than 50%. What this means is that women are already prejudiced in terms of the access to the active and productive economy. It is therefore not surprising that women are disproportionately represented in the poverty curve of the population.

Furthermore, a number of other factors have also been implicated in this economic dynamic. Besides the issues of violence, early marriage, and low school enrolment which we have noted above, there is also the cultural aspects of the problem. For instance, in most communities in Nigeria, it was not the rule that the girl child can inherit the land. The boys were often the ones who inherited lands and their sisters were to be married off with token gifts and therefore with nothing significant in terms of land ownership. This has since been declared illegal by the courts

(Library of Congress report May 6, 2014). It, however, happened only in 2014. What this created was a high level of exclusion from access to land either for agricultural purposes or credit facilities from financial institutions. The larger consequences of this in a country where land is a high symbol of social status is very important to consider.

A number of other handicaps affect the demography of the economy negatively against women. It is imperative to seek ways of overcoming these in order to give women real access to the economy. Farming and agricultural activities around it hold a huge potential especially for smallholder female farmers who often dwell in rural areas. Doing so will be very consequential to the economy since women represent roughly half of the population. Lifting them up might as well lift the economy up by that same percentage

Smallholder Women Farmers in Nigeria

In a recent study which surveyed the gender dimension of agriculture in Nigeria (Gbemisola et al 2017), it was noted that 35 percent of the entire labor in agriculture is done by women. Besides the daily staple crops like millet, corn, cassava, groundnuts, and vegetables, women are also increasingly involved in the production of cash crops. The production of livestock showed a more “marked gender divide as men are more likely to own and control larger and more valuable livestock such as cows, calves, bulls, and oxen. Women, however, tend to own and control smaller and less valuable livestock such as goats, sheep, and poultry.

Very few households (2 percent) participate in fishing and this is the only agricultural activity that primarily involves male-headed household with no female fishing activity in the North East, North West, and South East” (Gbemisola et al 2017). When examined in terms of the portion of women in the overall value chain of the small-scale agricultural economy it was seen that of the female managers, 32% of them process their agricultural produce while 36% of them sell the crops

they produce. This is compared with that of men which are put at 34% as processing and 38% as selling, respectively. What this readily shows is the narrow gap between the ratio of men versus women who are involved in small-scale agriculture. It must, however, be noted that this should be taken with caution since it was based on a limited number of the household surveys. Indeed, only 3000 (three thousand) households were surveyed. What can be taken away from this is that women are actively involved in agriculture in many regions of Nigeria. However, there is an important gender gap and limits despite a large number of women who are involved in agriculture.

One would not be able to appreciate the poverty reduction potential of smallholder women farmers in Nigeria without more closely examining the causes of poverty in Nigeria. These causes range from lack of formal education to inadequate modern agricultural technology. Education gives rise to better and greater opportunities. It increases the level of self-awareness and expels mediocrity. In Nigeria, there has not been much serious and conscious effort to engage women in education.

This result is that most women do not have the opportunity for formal education, especially in agriculture. Even in the Nigerian university levels, it is difficult to see women who are enrolled in the system to study agriculture as a course, let alone having the core knowledge of how to utilize their hidden potentials. It is therefore pertinent to ensure in Nigeria that there is a means through which women could be made to realize the potentials bestowed on them through education by so doing poverty would be reduced to the smallest minimum if not eradicated. Women would not be able to get this best from education if the education system is not functioning well. Therefore, there is a need to have a sound and well-supported education system in Nigeria that gives special consideration to women. The system also needs to include forms of education that are accessible and practical to smallholder women farmers.

This is because when there is a sound educational system, smallholder women farmers would receive the proper and necessary knowledge that would enable them to understand and use agricultural procedures and methods to achieve higher productivity and hence increase their chances of escaping poverty. The lack of sound educational system has its root to the serious political instability that has bedeviled the country for more than four decades. At independence, the country had a great agro-economic outlook. The intervention of the military in governance disrupted planning and concerted efforts towards education and greater socio-economic development of the country. The country was ultimately thrown into a civil war which not only led to the destruction of educational institutions but equally created policy inconsistency in various areas of public life. It also introduced a higher level of violence into society. In all these instabilities, women have been at the negative receiving end of them. No doubt, the potential of violence created a chill in the enthusiasm of many of the women to venture into agriculture and other economic activities particularly in the rural areas of the country.

Fortunately, the return of democracy in 1999 has greatly renewed hope in society. This also gave rise to relative stability but the after effect of all the instability accompanied by the oil increase destroyed the level of agricultural produce attained before then. The implication is that every person depended on oil and there was no effort made to diversify the economy. If the economy is diversified especially towards the agricultural sector, given the population of women and their involvement in agriculture, there would be a drastic reduction of poverty in Nigeria mostly in the rural areas. Also, due to the non-diversification of the economy, there is underutilization of resources. The resources comprise of both human and natural resources of which Nigeria possess both in abundance. Beyond oil and gas resources which dominate the economy with its allied industries, the large population of Nigeria comprises of youths. Indeed,

60% of the population is below the age of forty years. This means that there are able men and women whose talents can be applied towards lifting the economy. The non-maximization of these resources (especially women human resources) limits the potential growth in the GDP of the country.

Other Essential Considerations

Despite the number of issues which have been highlighted above regarding the nature, determinants and gender dimensions of poverty in Nigeria, there are many more which cannot be properly dealt with here. First is the persistence of structural inequality. This is not surprising bearing in mind that the economy is deeply riddled by corruption and rent-seeking. Therefore, only those with the ‘correct connections’ to government-sponsored poverty reduction schemes are able to take advantage of such policies. In particular, those who are literate and resident in urban centers are often better placed to take advantage of these policies. This state of inequality and high level of compromise of state institutions affects the resources that can reach the rural communities wherein agricultural production is the mainstay.

Connected to this are the activities of middlemen who control agricultural commodity prices in many of the rural and semi-urban communities. These middlemen not only prey on the limited availability of farmgate storage facilities like silos, barns and such other storages within the producing communities but also on the inability of the communities to easily access the markets which they need for their produce. The result is that most times products are either consumed as they are produced, sold at give-away prices, or left to perish. This creates a disincentive to produce in large quantities. What is therefore seen is that farmers produce the little needed for their immediate households.

Another essential consideration is the problem of inadequate rural infrastructures like roads, electricity and sustainable water and sanitation systems. The energy demands of the country are quite high, but this is grossly under pursued or provided for. This ultimately affects the capacities of smallholder farmers, in general, to add value to their farm produce. It is also a major source of displacement and incentivizes rural to urban migration. In the past, before and shortly after independence, there were farm settlements in many parts of the country where these resources and amenities were provided as a way of encouraging smallholders to live with their families in the areas and also engage in farming activities of all kinds. These have all been abandoned in pursuit of quick money that comes from rents paid on oil and gas resources.

Writing about the importance of farm settlement schemes in the Western region of Nigeria, a scholar had this to say : “the farm settlement scheme has the objectives; to bring rural progress; make farming efficient, lucrative and attractive to the hundreds of thousands of ...school leavers,...demonstrate that by careful planning, farms can be established and operated by young educated farmers...to mitigate against unfavorable land tenure system...and to particularly solve the problem of unemployment” (Dupe Olatunbosun: 1971). These views as expressed by Dupe are as relevant today as they were several years ago. It is also a good point to note that such objectives are even more important today than they were when they were first proposed because of the massive increase in the population of the country since then. Even recently, the Nigerian National Assembly – the equivalent of the Congress – called for the establishment of farm settlements. The call was justified on the need to encourage agro-entrepreneurship, especially among young people and women. It was also seen as a means to ensure food sufficiency and reduce poor nutrition around the country.

CHAPTER 3

STRATEGIES FOR HARNESSING THE HUGE POVERTY REDUCTION POTENTIALS OF SMALLHOLDER WOMEN FARMERS IN NIGERIA

As has been identified in this work, Nigerian poverty is complex and multi-dimensional. Its impacts on rural communities, and particularly on smallholder female farmer, are profound. This chapter focuses on a number of strategies that hold potential for reducing poverty in the country.

Inclusive Credit and Agro-financing Models

Market-oriented agriculture, even at a small scale, often requires access to credit for the purchase of seed, fertilizer and other inputs. According to Odemenem et al (2010), all loans and advances granted to borrowers to finance and service production activities (fisheries, forestry, food processing, marketing, storage and distribution of products from these activities) are referred to as an agricultural credit. Access to inclusive, effective, fair, reliable and affordable agricultural credit is therefore essential, especially to resource-limited households. Those who have monetary and other financial assets are often better placed to invest in agricultural production on a scale that generates marketable surpluses. Broadly defined, agricultural credit includes loans, grants, intervention funds or any other credit vehicle used to finance production or capital improvement activities. It can be short-term credits to purchase imputes like seeds during planting seasons. It can also come in form of long-term loans used for the purchase of land, tractors, installation of small to medium-scale processing machines, and construction of buildings for livestock. Lack of access to credit hinders the overall productivity of the agro-sector.

Inadequate financing of agriculture is a major problem in Nigeria. Commercial banks tend to have more interest in mining, infrastructure financing, and government bonds. These tend to offer

faster returns on investment and lower risk and so banks readily invest more in these areas. Bonds present a more reliable source of revenue for banks since the interest rates are stable and government guarantees help ensure repayments even in times of recession. What this means is that the average farmer is faced with insufficient credit access. This has to be overcome if agriculture-led rural economic development is to take place.

Smallholder women farmers are especially affected by this due to their lack of adequate collateral to secure these credits. Women are much less likely to hold legal title to land, machinery and other assets that can serve to collateralize loans. Also, the distance between the rural households and the banks also poses a huge barrier to them. This inadequate access to credit facilities hinders the growth and productivity of smallholder women farmers.

In terms of government interventions, it is clear from available schemes that despite the best efforts of the Government of the Federal Republic of Nigeria to set up the Bank of Agriculture (BOA) and also encourage the Central Bank of Nigeria (CBN) to pursue agricultural financing schemes by setting aside funds for that purpose, the efforts are grossly inadequate. Sometimes, executive redundancy and policy inconsistencies negatively affect the capitalization of these programs. Funds are not provided at predictable times and periods. Sometimes the credits arrive after the farming seasons with little or no impact to the agricultural productivity of the farmers. The policy environment is therefore weak and negatively impacts the objectives of making easily accessible credits available to the farmers and helping them put in their best in the project. Indeed, at the interest rate of 14% recommended by the CBN for commercial banks for customers seeking agricultural credit, it means that smallholder farmers in general and women smallholder farmers, in particular, stand a limited chance of success with these schemes. This is not far-fetched

considering that rural finance in Nigeria is at about 2 percent as shown in a recent report by the World Bank seeking new approaches to advance rural financial inclusion in the country.

The implication is that growth in the smallholder sector of Nigeria's agricultural economy is limited because these smallholder women farmers play an important role in that sector, yet they are largely excluded from agricultural credit. Enhancing Financial Innovation and Access (EFInA, 2008) reports that 23% of the adult population in Nigeria has access to formal financial institutions, 24% to informal financial services, while 53% are financially excluded. This relatively represents the number of smallholder women farmers' access to financial services through the formal institutions. The ratio of rural branches to total branches of formal commercial banks of the Nigerian Agricultural and Cooperative Rural Development Bank (NACRDB) credit institution is low when compared to informal money lenders, thrift savings credit association and semi-formal non-governmental organizations institutions (Odemenem et al 2010). This constitutes the limitation for smallholder women farmers. Since the rural poor, including women, have limited access to formal financial services, most depend on their limited ability for financing farming operations through small savings.

The important role of credit or agro-financing in agricultural enterprise development and sustainability cannot be overemphasized. The Federal Government of Nigeria has established credit schemes such as the Agricultural Credit Guarantee Scheme (ACGS) and Agricultural Credit Support Scheme (ACSS) to ensure adequate access to agricultural credit. The truth is that the situation has not improved substantially. It is estimated based on the 2006 Core Welfare Indicators Questioner Survey that only 18% of farm households (mainly smallholder women farmers) have access to financial services (Akramov, 2009).

The non-accessibility of credit by smallholder women farmers must be fixed to get the best out of the much-limited potentials. This would go a long way to improve agricultural development productivity and sustainability for a more robust economy. With the Central Bank of Nigeria (CBN) initiative of a new agricultural financing called Incentive Risk Sharing System for Agricultural Lending (NIRSAL) that took off in 2012, there is potential for a positive impact on agricultural production in Nigeria.

Expanding agricultural credit for smallholder women farmers is an essential prerequisite for rural poverty reduction in the country. An adaptation of the Brazilian Model of creating a social protection scheme that helps direct capital transfer to the poor could help address the lack of credit for women smallholder farmers.

Land Tenure Reform and Security of Proprietary Right of Women.

Creating an enabling policy environment for access to land is another strategy that has to be adopted in order to open up the possibilities that the involvement of women in agriculture offers. In other words, the existing land tenure and property rights in many rural communities in Nigeria have to be reorganized in an inclusive way. This is so because one of the major problems facing the smallholder women farmers is lack of access to the land for agricultural activities. Nwalieji et al 2011 noted that acquisition of land for new entrants into farming is difficult. The rules regulating the processes of land acquisition are often very technical and requires the services of experts like lawyers, and surveyors. The cost implications of this are highly discouraging for many women who have little or nothing to sustain themselves and their households let alone hire the services of one of the agricultural roles of local government Council that has not been achieved. The smallholder women farmers lack the capital to acquire land for agriculture. They are also limited by culture, customary land tradition, and religion. Moreover, the difficult system of documentation

or lack of documentation also creates a problem with tracing the true title and ownership of lands in the rural areas.

Until recently – 2014 – women were denied the right of inheritance of fixed property either in the maiden home or in the spouse’s home. What this means is that women were thus disinherited on both sides and as such could not own a land of their own for purposes of agricultural production or for securing agricultural credit. The practical implication of this is a direct pre-disposition to poverty and lack of access in general. Though this is changing due to interventions by civil society organizations, the changes are rather slow and unless there is a concerted effort made, not much will happen. There is, therefore, a need for reforms aimed at:

- a. Guaranteeing the right of women to own, use and deal with landed property all across the country;
- b. Simplify the methods of means of finding out the true ownership in time enough not to delay access to credits;
- c. A government-assisted scheme should be put in place to enable the smallholder farmers to evaluate and quantify their land property and issue them with necessary documents that can enable them to use the lands for agricultural purposes without fear or being taken advantage of by commercial banks;
- d. Allocating lands whenever the opportunity calls directly to the women and in their personal name instead of in the name of their husbands or their male children as is often the case.

These approaches and strategies will not only empower the smallholder farmers but will go a long way in contributing towards poverty reduction.

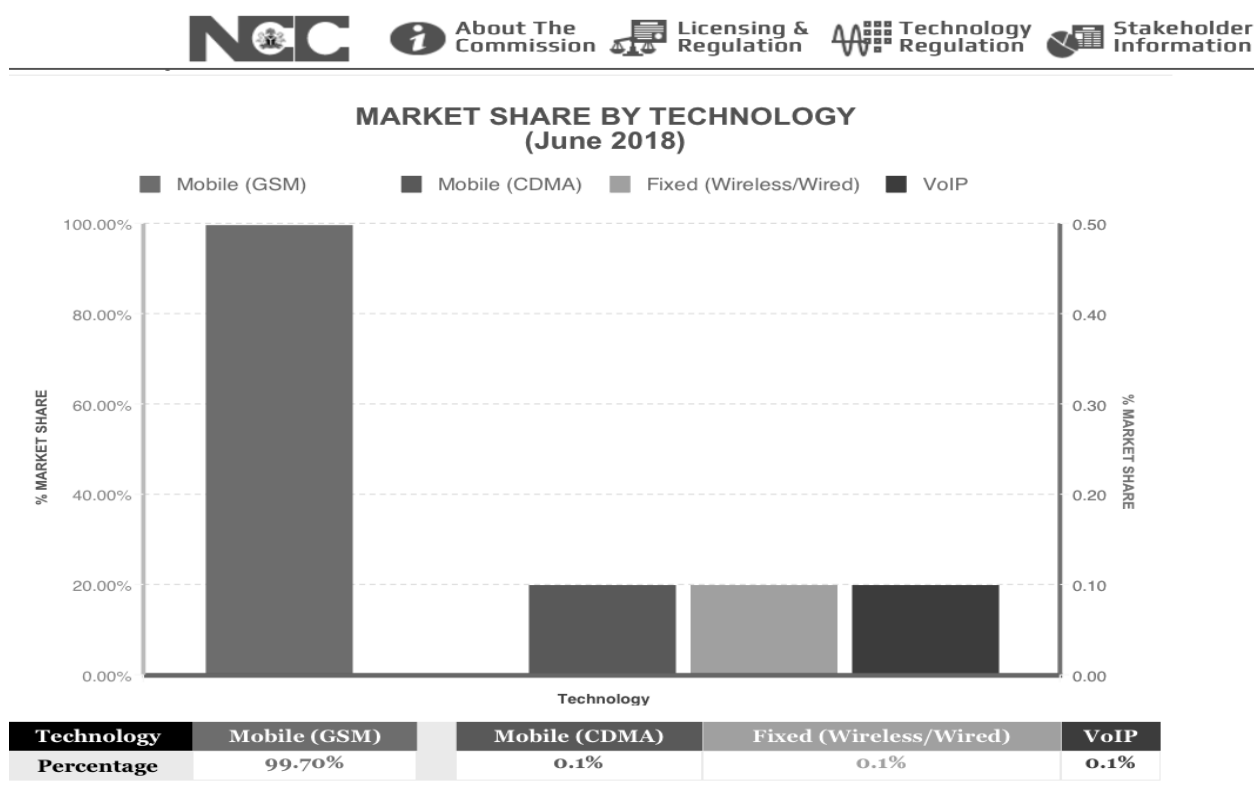
Massive Utilization of Mobile Technology – Mobile Money

It is true that digital telecommunication has changed the way we live and work in this century. Since the introduction of massive mobile telecommunication in Nigeria about the year 2001, many people both in rural and urban centers have keyed into the communication networks. What this means is that even farmers who live in rural communities without access roads can receive and give information through their mobile telephony. Utilization of mobile technology has to do with the ability of women farmers in the rural areas of the country to use modern digital gadgets to promote productivity in agriculture. This involves harnessing the power of information technologies to improve smallholder production and productivity. It would support the use of ICT by women, for example, Short Message Services (SMS), Multimedia Messaging Services (MMS), and other internet services. This will go a long way to breach the gap between them and their male counterparts.

In the past, there have been efforts by the UN to improve the level of technology know-how among women farmers. These efforts are intended to eliminate discrimination against women's access to agricultural resources, education, extension services, financial services, and labor markets (UN/FAO, 2015). It is necessary, therefore, for Nigeria to extend such services to the rural areas to ensure proper training of these smallholder women farmers. Technology literacy can play an important role in achieving agricultural productivity increases. The potential impact of this for poverty reduction in Nigeria is immense.

This because, according to the Nigerian Communications Commission (NCC) – which is the regulating body for both internet and telecommunications services in Nigeria – over 162 million Nigerians have some form of mobile telephone subscription (NCC: Statistics & Reports: June 2018). Despite the availability of other means of telephone communication, the mobile networks

are dominating the market. As can be seen in the graph directly below, 97 percent of telephony users depend on the mobile telephone system. This represents a huge potential for the use of mobile money technology.



Though the NCC data is not currently disaggregated by gender, it is recommended that future data collection enable research on the gender dimensions. with a view to making the best application of it towards dealing with particular problems that affect women in agriculture.

Another opportunity that this presents is that so many other things can be done even without the detailed analysis of the data in order to facilitate rural and smallholder female farmers' engagement with agriculture. Three key utilities of this strategy come to mind here;

- a. Direct credit and money access to smallholder female farmers, no matter their location in the country;

- b. Real-time agricultural extension services to them, and more effective and simple monitoring.
- c. A reliable platform for smallholder female farmers' complaints and feedback regarding agricultural policies and schemes that affect them.

What it means is that if the government or non-profit organizations were to use this infrastructure, it can deliver money to farmers directly to the telephones. This has proved successful in many places in Africa. Kenya is one example that is often cited. Since Nigeria has a huge population density as well as large rural populations of smallholder female farmers this appears to be an important strategy that can be used to reduce the high rate of poverty among that population. This has a further advantage of aggregating the large money in the informal sector and making it available for potential capitalization of other economic activities in the formal sector. It makes payments and receipts for farmers less troubling, particularly when considering the insecurity that moving large sums of money from one place to other poses in the country.

According to the World Bank, (2009) the essential goal of mobile money is a reduction in the overall cost of transactions. “thus, mobile money technology has become a savings instrument, as well as a means to send money. Sometimes, money is stored in an MMT account simply to save persons from carrying too much cash, especially, for example, on long and potentially dangerous bus trips. With a large network of MMT agents in the rural areas, it can especially make it easy for agricultural households to reduce the time and cash expense in accessing funds they need to invest in agriculture” (Olive K. Kirui & others 2013).

Development of Farmgate Storage and Processing Facilities:

Storage and processing are key to adding value to agricultural products and enhancing income for rural farmers and other entrepreneurs. There is, therefore, a constant need for proper storage

and processing facilities of these products – palm oil, cassava, millet, potato, onion, and other easily perishable produce. This is to avoid postharvest losses arising from decay and other problems often experienced by smallholder women farmers in Nigeria. A majority of these products are cultivated or received in the rural areas. Unfortunately, there have not been many efforts to improve methods of storage for farm produce. Investment in farmgate storage and processing facilities should be another priority rural economic development strategy for national and regional governments. Except for strategic reserves for times of potential famine, farmgate storage facilities are generally lacking in Nigeria. Often, smallholder female farmers rely on traditional methods of storage which are often inadequate for maintaining quality expected in the markets.

In the case of palm oil production, there is a need to have oil processing machines very close to the palm plantations. The implication is that when such processing facilities are made available close to the farm, it would reduce cost, risks and amount of wastage. The government should, therefore, provide for or help smallholder farmers mobilize the capital to invest in adequate storage and processing facilities. This would enhance farm household welfare and improve productivity. Strategically, these facilities are important as they help conserve food and enhance financial returns to farming throughout the year. Also, smallholder female farmers are the first line of response when there is an outbreak of famine or resistant crop diseases. Equally, some types of postharvest storage facilities help maintain the seed varieties and general biodiversity of the crops across different regions of the country.

Collation, Analysis, Processing, and Use of Dependable Agro-Statistics:

Proper collation and use of agricultural statistical data enable government, agribusinesses and farmers' organizations make informed decisions. Data on production levels, market dynamics

(supply, demand, and prices over time), and on the availability, use, and cost of key inputs and other factors of production are essential as smallholders transition from semi-subsistence to more commercially-oriented farming. Collating data is one and making use of the data is another. The statistical information should also be made available and accessible to the smallholder rural women farmers for proper use.

In Nigeria, the National Bureau of Statistics has its branch offices in all the 776 local government councils of Nigeria and this makes for collection and collation of data from the different rural and sometimes remote parts of the country. The National Bureau of Statistics is also doing a great job of gathering data on many aspects of the economy. What is, however, noticeably missing from the data available on their website, is that not much specific attention has been given to the question of smallholder female farmers in the country. I think that a committed study of this group and aggregation of data on them will provide the much-needed information for making policies that will help secure their livelihoods and by so doing help in reducing their poverty quotient in the country.

Also, data collection and information processing are a very integral aspect of agriculture. The rate of rainfall, the intensity of sunlight, soil test, plants breeding, and livestock monitoring are all types and ways of data collection and information processing. For any agricultural policy and economy to achieve its long-term target, it must take the information very seriously. It is through this that the government would know the actual number of women in the rural area and the actual number of them in agriculture. This would enable the government to take a decision on who gets what and know where more effort or resources should be channeled.

It is therefore very important for the government to make a serious effort in fixing the manner the obtain their information. This is because if mistakes are made in the data and

information collection process, the whole process would be affected by the implementation of policies formed through such data. As the government is aligning itself with a medium-term expenditure framework, it would be good and advisable that such an approach is applied in terms of data and information collection and processing. Unlike in the case of the census that takes place every ten (10) years, it would be good and advisable for there to be data and information collection every two (2) years.

There should be statistical data collection and information management office in all the local government councils closer to the rural people in that this information and data could be collected even when the rural people are not aware that such collection is going on. Local government autonomy should also be a way forward to this as information and data collected would be effectively used for the development of the area.

Affirmative Government Budgetary Policies for Smallholder Women Farmers:

Because of the high marginalization of women in general and the discriminations they are faced with daily, it is important that real affirmative budgetary intervention is made towards their affairs. The need for this in order to encourage female farmers cannot be overemphasized. It is also my belief that affirmative action by the government in terms of budgetary policies is what Nigeria needs to move the agricultural sector forward. However, the unfortunate thing is that agriculture is allocated less than 10 percent in the national budgets over the years. This is against the Maputo and Malabo declaration that the Nigerian government signed into which calls on the governments to allocate a minimum of 10 percent of their annual budget to agriculture. It is on this ground that women farmers in some state of the federation like Bauchi, Benue, Imo, and FCT called on the state governments to allocate at least 10 percent of its budget to agriculture in the 2018 fiscal year.

This is to revitalize the economy of the states as well as create wealth and jobs to their teeming unemployed citizens. Given that women form most of the population of farmers and those living in the rural area who also depend on agrarian products for survival, the local government council, the state government and indeed the federal government should ensure that at least 10 percent of their annual budgets are allocated to agriculture. This would go a long way to enhance the welfare of the farmers and the citizens at large. This would help to unleash the hidden potentials of smallholder women farmers. This is one strategy that can create multiple impacts on poverty reduction, especially among smallholder female farmers

Primary Health-Care and Maternal Provisions:

There is an adage which says health is wealth. It is only a healthy person that would provide or engage in agricultural activities. The health of women should be treated with the highest level of importance. Given the involvement of women in the agricultural sector and many other critical aspects of household and community life, women's health should be a high-level national priority. There have been several efforts made by the WHO and international NGOs focused on women's health. These efforts should be increased and sustained as the contribution of women in agriculture and the general welfare of the country cannot be overemphasized.

The government should make additional investments in rural health care. Currently, both access to and quality of rural health services are lacking. There is a high rate of maternal mortality in the country due to lack of resources for providing quality skilled care for women during pregnancy, childbirth and the postpartum period. The rural health sector should be strengthened not only as a matter of ethics but also because it has a direct correlation with the level of agricultural productivity.

Targeted and Result Based Extension Services

Generally, development experts have promoted results-based and targeted systems for the delivery of development goals. This came from general studies in the social/behavioral sciences suggesting that unless the outcomes of a given policy or program of development are first envisioned clearly and systematically pursued, the end result will at best be uncertain. At worst it will be a general failure. Thus, a results-based agro-extension service will mean a clear articulation of the different levels, or chains, of results expected from a particular intervention – project, program or development strategy – that is connected to agriculture. In a way, this also draws attention to the way agricultural extension services are to be designed, processed and implemented. The results-based system clearly sets out goals and the means for achieving those goals. It sets out the timeline and the methods for evaluating the impact or otherwise of the goals. This is important because often government policies are not designed in ways that encourage real-time delivery and clear measure of outcomes. This creates redundancy and losses that could have been avoided.

The point, I seek to push is that effective agricultural extension services should be targeted and result oriented. This is so because agricultural extension involves the conscious and targeted use of communication, training, teaching, and learning programs to advance agricultural productivity and rural vitality. It may involve the demonstration of the use of new farming methods. It may also be a showcase of new and improved varieties of crops, breeds of livestock or things of that nature. At other times, it may involve responses to the outbreak of crop or animal diseases and how best to deal with it. So, on the face of it, agricultural extension service is a very critical strategy since it deals with all aspects of farming. It covers the entire network of activities aimed at making agriculture attractive, productive and efficient as a means of enhancing health, food security, and

general wealth creation. The importance of agricultural extension, therefore, cannot be overemphasized.

In Nigeria, the Federal Ministry of Agriculture and Natural Resources is the body empowered to develop and implement agricultural extension services. It has other subordinate institutions that work with it, but it performs the supervisory role. It also has centers and offices located around the country. Most of its work is, however, a top-down approach to policies. Sometimes this is not effective as policies are either not well interpreted or poorly implemented.

Also, the ministry has a network of NGOs that works with it to disseminate information and assist it in pursuing the mandate of effective extension services. An examination of the policies of the ministry shows that there is a large focus on producing radio and television programs as the main means of engaging in agricultural extension services. They also work in conjunction with agricultural institutes like the National Root Crops Research Institute near Umuahia in the South Eastern part of the Country. There are also other centers in different parts of the country focusing on different crops and serving as centers of excellence in Benin, and Ibadan.

What I find missing is that despite the vast network of capacities and organizations involved, there is no clear result-based orientation of the policies. Also, extension programs too infrequently consider gender in their design and implementation. The target groups are often created around particular agricultural products. So, you can find extension services directed at cocoa farmers, oil palm producers, rubber farmers, and livestock farmers. There is also so much focus on cash crops for export promotion and earnings. With this, it becomes difficult to deal with the particular problems of women as affects their agricultural productivity. Lumping them together reduces the maximum impact such policies could have had on the economic welfare of the smallholder female farmers.

The idea which I am putting forward, therefore, is that there should be a deliberate effort at targeting smallholder female farmers in order to help them take advantage of the huge potential of agriculture as a means of poverty reduction. This will empower them to do other things like providing good food for their household and helping to train their children to become potential leaders in the agricultural field.

Mobile telecommunication has penetrated several areas of the country, opening up new channels for extension and other educational programming. Beyond the Radio Farmer Programs, direct and timely dispatch of information can be done to the mobile phones of these farmers. Illustrative podcasts and videos can also be directly posted to them. This will personalize the available knowledge especially when this is done in their local languages. Direct information regarding drought, planting methods, varieties of crops and water conservation procedures can help greatly in empowering smallholder female farmers. It is only in doing this that the proclaimed mandate of the agricultural extension units in the ministries of agriculture will become meaningful.

CHAPTER 4

NOTABLE CHALLENGES WHICH SHOULD BE DEALT WITH TO ENSURE OPTIMAL OUTCOMES FROM THESE STRATEGIES

From the discussion so far, it is obvious that smallholder farmers represent a group with a lot of commitment but limited access to economic activities in Nigeria. Their efforts at self-sustenance are challenged by not only marginalization based on societal prejudices but also on a lack of targeted and result-based policies that could address their situation. Given the population of women in smallholder agriculture and the correlation of that to the economic growth of the country, it is important to remove all obstacles on the path of harnessing the best they represent. Neglecting them or doing things the way it has been done in the past would mean that the country would be neglecting a major contributor to the reduction of poverty in Nigeria. Informed by this, the chapter makes a broad outline of the challenges that may hinder the full use of the potentials of smallholder women farmers in Nigeria as a means of ultimately reducing poverty.

Transparency in Agro Policies and Implementation

To ensure that the proposals for the policy shift towards the best possible outcome for smallholder female farmers in Nigeria, policy proposals in the field of agriculture have to be clear, concise and transparent. Transparency in carrying out government proposals is especially important when it involves the interests of people with limited education. Often the policies are either not well clarified or are carried out in a manner, that makes it difficult for the target group. There are also the elements of corruption where middlemen take advantage of the subsidized agricultural inputs and services and subsequently retail them at high prices to the farmers. One area where this well noted for is the in the distribution of fertilizer, seeds, and other planting

materials. Cases of diversion are often reported. Government officials are often implicated in these schemes.

Other noted areas wherein lack transparency is readily observed are in the areas of land allocation, credit transfer to farmers, credit facilitation, granting of licenses for distribution of government procure, and subsidized agricultural inputs. This is increasingly changing due to the activities of non-governmental organizations who now take steps to monitor the implementation of projects. One example of this is in the FADAMA programs which have been executed in many parts of the country with a high rate of success.

Also, the introduction of the idea of e-agriculture where internet communication technology is applied in all the processes is another way of dealing with the problem. It connects to the original idea regarding the massive use of mobile technology in solving the problems related to agricultural extension services and credit facilitation (Okewu & Okewu: 2015).

Women's Financial Dependency:

The fact remains that women depend heavily on their male counterparts for financial support in Nigeria. The sociocultural environment still makes the financial autonomy of women generally limited. It is thus difficult for even highly educated women to pursue their interests, and as such, it makes them redundant in the economy. There is, therefore, a great need to overcome this challenge. This will set the women free to seek opportunities and to contribute their best towards the elevating the standing of women and reducing the overwhelming index of poverty in the country. There should be some serious change from this through the help of the government by fashioning ways to make women financially independent.

The federal government through the CBN should make lending policies that would give women easy access to fund whenever the need finance. The federal government through the CBN

should work closely with the commercial banks in the country to ensure that funds are made available to smallholder women farmers with or without collateral. Micro-finance banks should also be made to make funds available.

One way of doing this is by engaging in the massive grassroots reorientation of the populace. In churches, Mosques and other private and public places in the country there is a need to push the agenda of financial autonomy of women as indispensable in the fight against massive poverty in the country.

More so, since the majority of these women are in the rural areas of Nigeria; the government must create incentives for private commercial banks to site their offices in the areas so that where their services are needed, the women can easily access such services. Where necessary microfinance institutions may be created and mandated to fill the gaps where it will be logistically more difficult for big commercial banks to do so. If funds are made easily accessible and if smallholder women farmers are financially dependent, there would be a rapid growth in the agricultural sector which would trigger positive economic activities in other sectors of the economy.

Cultural Limitations and High Incidence of Child Bearing:

Women are highly limited by culture. Overcoming these limitations are some of the most important pathways towards helping the women to discover themselves and participate actively in the agro-economy and contribute to poverty eradication in the country. Some cultural and traditional land tenure systems impede the right of women to access land needed for agricultural purposes. Thus, even when they have the capacity to do so, a man has to be appointed to lead the program or project. There should, therefore, be a radical change in many of the cultural and

traditional land tenure systems. Targeted reforms in this area will enable women to either inherit land or have the opportunity to acquire land for their agricultural pursuits.

Another challenge is the high incidence of childbearing among women in Nigeria. This takes not only a toll on their health but also on the amount of time which is devoted to child care and post-natal recovery. A woman that gives birth to 5 children over a 15 years period of time would lose 75 months to agricultural labor. (Five 9-month pregnancies plus 6 months of recommended WHO breastfeeding per child).

The impact of childbearing on women's economic contributions in farming households is large and proportional to family size. Considered across a community, or across an economy, the impact is huge. Consideration has not been made here of the health implication on these women and the resultant effect on the economy also.

If these women decide to give birth to fewer children, women could devote much greater time and energy and resources to agriculture. The impact on the welfare of these women farmers and the economy at large would be great. Increased educational opportunities for young women is a proven strategy for reducing rates of childbearing.

Sustainable Approaches to Farming and Utilization of Water Resources:

There are two conventional seasons in Nigeria, the rainy season and the dry season. To achieve sustainability in terms of farming in the country, cultivation must be done a season and out of season. To cultivate both in the rainy season and dry season, the two variables of water and sunlight should be in a constant supply. The later (sunlight) seem to be beyond human control whereas the issue of water could be controlled. Therefore, for sustainability to be achieved the government should ensure that the water resources scheme in the country is effective and efficient.

No agricultural process can succeed without water and no irrigation could be carried out without water, therefore the need for efficient water resource. Efforts should be made to establish, maintain and sustain regional water schemes across the 36 states of the federation including the Federal Capital Territory (FCT). A situation where every household is sure of water tap in front of their houses, it would go a long way to improve agricultural production and improve the welfare of the citizens.

When this happens, smallholder women farmers and individuals can easily engage in the irrigation farming, fishery, poultry and other aspects of livestock rearing. There should be a steady power supply which would help in the processing and storage of agricultural produce. Efforts should be made to improve the road network in the agricultural sector as the product would be easily moved from farm to market, processing place and storage areas. It is therefore important for the government to ensure that these areas are working effectively. This is because achieving agricultural sustainability is as important as achieving agricultural growth and development.

Education

Owing to the massive illiteracy rate among women in Nigeria there is a need for continued intervention in order to help them take advantage of the opportunities that are available within the economy. This is so important because education represents one of the earliest social policy interventions aimed at advancing development in the country. This was seen in the establishment of schools in many parts of the country even during colonial times.

According to Nelson Mandela, “Education is the great engine of personal development. It is through education that the daughter of a peasant can become a doctor, that the son of a mineworker can become the head of the mine, that a child of farm workers can become the president of a great nation. It is what we make out of what we have, not what we are given, that

separates one person from another”. In essence, education is critical and the illiteracy index as it stands today is unacceptable.

The level of illiteracy in the rural areas needs to be reduced drastically – to the barest minimum. This could be achieved through education. There is a need for self-awareness among the rural people especially the women. It is through education that women would learn and understand how they can have access to land. It is through education that women could understand different policies made on their behalf. Through education, women would not only understand the policies but would be part of formulating such policies and making decisions that would affect their well-being.

Through education, women would be able to get information and the best possible ways to access loans, grants and become financially independent. Through education, they would know the best possible ways to produce, process, market and store their agricultural products. Interpretation of data and information would only be done by their exposure through education that they could close the gap between the women and their male counterparts. It is therefore urgently necessary and important to engage women in education. The government should make effort to engage women in education. Women education should not only involve the formal education but should include specialized training that would enable them to unleash their potentials especially in terms of agriculture.

There should be specialized programs fashioned to train women in different aspects of life as to regard their involvement in agriculture. In these types of programs, those little but necessary things about agriculture that may not be taught in the formal sector of education would be considered. Meanwhile not all the women may have the opportunity to get to the formal sector of education. Scholarship programs could be initiated for women to ensure that most of them obtain

the needed education for adequate involvement in agriculture and appropriate contribution to the economy of Nigeria.

One issue that seems to be contributing to the illiteracy level is the massive growth in population which is constantly putting a strain on available opportunities and educational institutions. The problem as has been noted is still very significant among women. In a recent survey carried out by NBS with the aim of obtaining basic information about adult literacy in Nigeria and with the aim of finding issues of concern which should be dealt with, it was noted that “only 57.9 percent of the adult population was literate...literacy is an indispensable catalyst needed for development and democracy to grow. Literacy is also critical to any successful poverty eradication strategy” (NBS: Literacy Survey 2010). Specifically, as it concerns women it reported the literacy rate as 71 percent. However, this 71 percent might be deceptive if not carefully analyzed. When the data is looked at closely, what is seen is that in a place like Lagos, the literacy rate was put at 87 percent. Other places like Jigawa, Kano, and Kebbi were put at between the range of 27 to 29 percent. What this means is that the average literacy rate of 71 percent on the national level does not take away the gross low literacy in particular states and regions of the country. This obstacle must, therefore, be removed as a matter of urgency if poverty is to be eliminated from the mass majority of households in the country. Literate women are in a better position to assimilate, interpret and apply best agricultural practices and hence boost production and income generation.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

So far, this work has looked on a number of strategies for improving the poverty reduction potential for farming for small-holder women farmers in Nigeria. It has looked at a number of ways to overcome the challenges and hence harness the potentials that smallholder farming amongst women presents for the purposes of reduction in poverty first among this group and consequently in the larger Nigerian society. Going by the information and secondary data that was seen in the field, much needs to be done urgently and if the fight against poverty in Nigeria is to achieve the expected results. In that regard, it is my intention here to draw attention to some recommendations that will not only be used for future research into the field but also serve the very important need of setting up an agenda for policy review and policy implementation in the country. While these recommendations are my earliest impressions in the field, I do believe that they are important bearing in mind the state of women in the poverty in Nigeria and what benefits that could be derived from agriculture that has been abandoned because of inadequate policies and poor implementation of existing ones.

Recommendations for Policy and Poverty Reduction Through Agriculture:

It is important to explore changes through land reform and financial support to female smallholder farmers. Land ownership and access to land for smallholder farmers is a critical problem to the full success of female farmers in the country. It is therefore recommended for policy purposes that an inclusive land reform should be carried out throughout the country. The Federal Government should lead in this direction by working out standards that may be adopted and used by the federating states so as to remove the burden which lack of access to land imposes on smallholder female farmers around the country.

No country (from what I have learned, and even observed from my study trip to India) can meaningfully attempt to reduce poverty without paying adequate attention to agricultural financing. The Nigerian state still budgets meager resources to agricultural programs and projects. Often there is a feeling or a culture of dependence on foreign aid or donor agencies to finance agricultural programs. This is inappropriate. It is also my view that finance facilities and subsidized allocation of lands could help in reducing this problem. This can be done in units where female farmers cooperatives can come together to acquire or rent land for agricultural purposes.

A quick policy initiative in this area is to appoint women into the management organs of the respective institutions that supervise lands and ownership of property. The government can also make it a requirement for all local governments to be gender inclusive for the purpose of accessing government grants and or participating in agricultural extension services. There should also be a periodic review of the activities of land management units within all branches of government. Direct feedback from the female smallholder farmers from the different regions of the country if properly harnessed can give a better picture of how the field is progressing or otherwise. This is a necessary first step in the overall problem and tapping the energy of smallholder farmers towards poverty reduction in the country.

The government can also bring change through fiscal and monetary policies. This can be done by setting out reasonable funds in the annual budget to finance the agricultural activities of this focus group. The mobile money process is one way of achieving this.

Equally, agricultural extension services are key to getting the best outcome from farmers. There should be further created a platform where women farmers can exchange ideas and experience with expert and researchers for efficient production. This can also be linked to the idea of peer to peer engagement among the farmers so that they can learn from each other.

Above all, only healthy women can work and the healthcare needs of women in general in Nigeria are rarely met. Access to health care facilities particularly in the rural areas is, therefore, one of the biggest problems in the country. This has created high incidences of maternal mortality and unless this is attended to, there will continually be a decrease in the number and capacity of the people who can get involved in agriculture or other aspects of the economy. It is, therefore, my recommendation that issues of primary health care be confronted frontally in the country – especially as it affects women.

CONCLUSION:

Nigeria is a great country and a dominant economy in the West African Region and Sub-Saharan Africa in general. It has an estimated population of nearly 200 million people. Approximately half of that population are women. It also has a relatively young population as the average age of its citizens is put at below 40 years. In 2010, 43.8% of women accounted for the economically active population in Sub-Saharan Africa. In the same 2010, women accounted for 36.9% of the economically active population in Nigeria (FAO,2010). Many of the women active in the Nigerian economy are involved in one form of smallholder agricultural activity or another. It, therefore, means that articulating their interest in a way that further empowers them will go a long way in creating more productivity in the population and enhancing wealth for many in the country. They represent a huge potential and if the strategies we have highlighted including financing, land reform, health care and agricultural extension are put into policy, a great leap will be made in reducing poverty through the smallholder female farmers in the country.

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